

### **REMARKS**

In the Final Office Action dated March 23, 2007 (“Final Office Action”), the Examiner rejected claims 1-4, 6, 7, 10-12, 14 and 15 as anticipated by U.S. 6,446,053 (“Elliot”). The Examiner also rejected claims 5, 8, 9 and 13 as being obvious over Elliot. In a response after final, the Applicants pointed out that the rejections of the pending claims based on Elliot were improper for at least the reason that the terms “schedule” and “specification,” should be interpreted as having special meanings, and that when the claims with those terms were properly construed, they were clearly not obvious or anticipated by Elliot. In an Advisory Action mailed on October 18, 2007, the Examiner stated that the meanings for “schedule” and “specification” were not apparent from the claims, so those terms would be given their broadest interpretation, not the special meaning from the specification. In response, the Applicants have removed the terms “schedule” and “specification” from the pending claims, and replaced them with specially coined terms which have explicit definitions included in the claims themselves. Below are set forth remarks explaining how those amendments, as well as other limitations, distinguish the pending claims from the art of record.

#### **Aspects of the Contract Document**

Each of the independent system claims, claims 1, 2, 4, and 6, is directed to “[a]n open-network system for automating an architectural process of creating a *plurality* of aspects of a contract document” (emphasis added). Further, each of claims 1, 2 and 4 recites

the plurality of aspects of the contract document comprises

- a) an item enumeration comprising a listing of repetitive building parts; and
- b) a technical attribute listing comprising a written detailed description of materials and processes that make up a building.

Similarly, claim 6 recites that

said plurality of aspects of said contract document wherein said plurality of aspects comprises an item enumeration comprising a listing of repetitive building parts, architectural details, and a technical attribute

listing comprising a written detailed description of materials and processes that make up a building.

Consequently, each of claims 1-6 is novel and unobvious over references which do not teach or suggest automating the architectural process of creating a plurality of aspects of a contract document, where the plurality of aspects comprises an item enumeration and a technical attribute listing.

Similarly, as is recited in claim 7, the pending method claims are directed to:

A method for automating an architectural process of preparing a plurality of aspects of a contract document comprising architectural drawings, an item enumeration aspect listing attributes of repetitive building parts to be incorporated into a building, and a technical attribute listing describing materials and processes selected to construct the building

Consequently, like claims 1-6, claims 7 and the claims which depend therefrom, are novel and unobvious over references which do not teach or suggest automating the architectural process of preparing a plurality of aspects of a contract document comprising an item enumeration aspect and a technical attribute listing.

Turning now to the prior art, U.S. 6,446,053 ("Elliot"), which was cited as the basis of all art based rejections in the Final Office Action, does not teach or suggest automating the creation of item enumeration and technical attribute listing aspects of a contract document, because Elliot is focused on an entirely different facet of the architectural process. Particularly, Elliot is a "tool that enables owners to accomplish the tasks usually performed by a general contractor." (Elliot, col. 2, ll. 18-20). However, as is set forth in lines 4-15 of page 1 of the Applicants' disclosure, the "contract document," and the aspects thereof, is created by architects and engineers. A tool which enables owners to perform tasks of a general contractor (e.g., preparing cost estimates, and hiring and managing subcontractors, as listed in lines 19-36 of column 1 of Elliot) does not teach or suggest automating the creation of the aspects of a contract document because creation of the "contract document" is completed before a general contractor becomes involved in the architectural process.

An examination of the specific portions of Elliot cited in the Final Office Action as teaching automatic generation of aspects of a contract document confirm that Elliot does not

teach or suggest the automatic generation of the item enumeration and technical attribute listing now recited in the independent claims. The Final Office Action stated that the aspects of the contract document are disclosed in figure 6 of Elliot and that

table 1, col 7 shows more clearly that the items in fig 6 are a schedule as listed in steps and phases and the steps in each phase delineate the specification of the structure such as “designate and install floor covering”, designate and install fire sprinklers or not” and this is further described below the table in col 7, lines 65-66.

However, upon examination, figure 6 of Elliot does not teach automating the process of preparing at least: 1) an aspect of a contract document which comprises a listing of repetitive building parts; and, 2) an aspect of a contract document which comprises a written detailed description of processes and materials that make up a building. Instead, figure 6 of Elliot is “a representation of a display screen including a timeline.” Elliot, col. 3, ll. 31-32. Such a timeline does provide a written detailed description of processes and materials that make up a building, nor does it provide a listing of repetitive building parts. Similarly, having reviewed Elliot, the Applicants assert that no other portion of that reference is more relevant than that cited in the Final Office Action. Therefore, the rejections based on Elliot should be withdrawn, because that reference does not teach or suggest automating the process of creating the item enumeration and technical attribute listing which are currently recited in the pending claims.

#### Additional Distinctions

As the independent claims have been amended to remove the terms “schedule” and “specification,” so dependent claim 8, and dependent claim 9 which depends therefrom, have been amended to remove the term “vector equation.” In the Advisory Action, the Examiner stated that

As to the term, “Vector equation”, as applicant has noted, it is old and well known in the art, while not exactly the same as a vector equation to an engineer, as it is old and well known in the architectural arts, the rejection of the claims with this limitation is considered proper.”

As an initial matter, the Applicants note that the use of a vector equation as was previously recited in claim 8 is not “old and well known” in the art. Rather, the Applicants submit that meaning of a “vector equation” is well known in the art, but that the association of data with a vector equation, and the generation of a detail aspect based on the vector equation, as was recited

in the claims is both novel and non-obvious. However, to avoid further semantic disagreements as to the proper interpretation for the term “vector equation,” that term has been removed. Instead of a “vector equation,” claim 8 now recites “a representation equation representing the geometry of the parameterized parts of a drawing.” Associating data with such a representation equation, and then generating a detail aspect based on that representation equation is clearly not taught or suggested in the prior art, because drawings can be based on sources other than vector equations (e.g., a photograph, as taught in lines 40-42 of col. 5 of Elliot). Similarly, creating architectural drawings based on representation equations associated with data as recited in claim 8 is not rendered obvious by the computer aided design software disclosed in Applicants’ application, because there is no teaching or suggestion that that software includes the capability to create detail drawings based on representation equations associated with data. Consequently, the use of representation equations in claims 8 and 9 provides an additional reason why those claims are patentable.

Claims 10 and 14, though not addressed in the Advisory Action, also include limitations which provide further points of distinction over the art of record. Claim 10 recites a step of automatically creating drawings using data from data entry locations in the item enumeration aspect and technical attribute listing of the contract document. That step is not taught or suggested in the prior art because the prior art does not teach or suggest automatically creating one or more architectural drawings based on information from data entry locations in other documents. Similarly, the prior art does not teach or suggest any type of data entry locations into the item enumeration aspect and technical attribute listings of a contract document, and therefore *cannot* teach the particular use for data in those data entry fields (automatically creating one or more architectural drawings) which is recited in claim 10. Further, claim 14 has been amended to recite that allowing a user to edit a technical attribute listing comprises maintaining linkages between information aspects of information in the technical attribute listing, using those linkages to automatically renumber sections of the technical attribute listing, and allowing a user to use a text editor to edit an automatically created final draft of the technical attribute listing. Claim 14 also recites that the final draft is automatically created based on the selection of attributes stored in a user database. Those limitations are not taught or suggested in the prior art because the prior art does not teach or suggest maintaining linkages between aspects of information in a technical

attribute listing, and therefore does not teach or suggest the particular usage for the plurality of linkages (automatically renumbering sections of the technical attribute listing) which is recited in claim 14. Similarly, the prior art does not teach or suggest that a technical attribute listing is created automatically based on user selections of attributes which are stored in a user database. Consequently, even if the rejection of independent claim 7, from which both claims 10 and 14 depend, is not withdrawn, the rejections of claims 10 and 14 should be withdrawn, and those claims should be allowed.

#### Support for Amendments

Regarding the terms “item enumeration,” “technical attribute listing,” and “representation equation,” the Applicants assert that no new matter is added by the introduction of those terms and submit that support for the amendments to claims 1-6 can be found in at least lines 10-18 of page 2, and line 21 of page 8 of the application as originally filed. Further, the Applicants point out that the use of terms which do not appear in the specification is permissible, because the subject matter of the claims need not be described in the same words in the specification,<sup>1</sup> and because one of ordinary skill in the art would clearly have recognized that the inventors invented what is claimed based on reading the original application.

Regarding the replacement of “one or more” with a “plurality,” support for those modifications can be found throughout the application as originally filed, for example, in the discussion of data entry and incorporation on page 5. Support for the amendment to claim 10 regarding creation of a drawing based on information from a data entry location can be found in at least page 8 of the application as originally filed. Support for the amendment to claim 14 regarding maintaining linkages, renumbering sections, and generating aspects of the contract document can be found in at least pages 10, 12 and 14 of the application as originally filed.

Regarding new claims 16-17, those claims are intended to make clear that a technical attribute listing can be synonymous with a specification, and that an item enumeration can be synonymous with a schedule. Claim 18 is intended to provide a further, specific example of an application of a schedule and specification. Support for each of claims 16-18 is found in at least page 2 of the application as originally filed.

**CONCLUSION**

In light of the amendments and remarks made herein, it is respectfully submitted that the claims currently pending in the present application are in form for allowance. Accordingly, reconsideration of those claims, as amended herein, is earnestly solicited. Applicants encourage the Examiner to contact their representative, William Morriss at (513) 651-6915 or [wmorriss@fbtlaw.com](mailto:wmorriss@fbtlaw.com).

The claims after amendment stand at 18 total with 5 independent. Since the two extra independent claims have been paid for in a previous action, no claim fees are due. However, if necessary, the Commissioner for Patents is hereby authorized to charge any deficiency or credit any overpayment of fees to Frost Brown Todd LLC Deposit Account No. 06-2226.

Respectfully submitted,

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<sup>1</sup> MPEP § 2163.02.